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Gail Wuellner Monsanto Company 800 N. Lindbergh Blvd. Mail Zone E2NA St. Louis, MO 63167			NEGIN, RUSSELL SCOTT	
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UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte YONGWEI CAO, AZITA GHODSSI, GREGORY J. HINKLE,
JAMES D. McININCH, WILLIAM E. TIMBERLAKE,
and JAEHYUK YU

Appeal 2007-4453
Application 09/404,520
Technology Center 1600

Decided: May 19, 2008

Before TONI R. SCHEINER, DONALD E. ADAMS, and ERIC GRIMES,
Administrative Patent Judges.

Opinion for the Board filed by *Administrative Patent Judge* GRIMES.

Opinion Concurring filed by *Administrative Patent Judge* ADAMS.

GRIMES, *Administrative Patent Judge.*

DECISION ON REQUEST FOR REHEARING

Appellants have requested rehearing of the decision entered January 31, 2008 (hereafter “Decision”). The Decision affirmed the rejection of claims 58-79 for lack of patentable utility. The request for rehearing is denied.

DISCUSSION

Appellants argue that Rodriguez-Tomé does not teach all the elements of the claims because it does not teach the recited SEQ ID NOs (Req. Reh'g 12-13). This argument is repeated almost verbatim from the Appeal Brief (pp. 10-11 and p. 12, first paragraph) and was addressed in the Decision (p. 4). It does not represent a point that we misapprehended or overlooked. 37 C.F.R. § 41.52.

Appellants also argue that the SEQ ID NOs recited in the claims are functional descriptive material because they are analogous to target nucleic acids in a “wet chemistry” array (Req. Reh’g 6-7); that the facts of the instant case are distinguishable from those of *In re Ngai*, 367 F.3d 1336 (Fed. Cir. 2004), and are more similar to *In re Gulack*, 703 F.2d 1381 (Fed. Cir. 1983) (*id.* at 9-11); and that “the claims must be read as a whole” and the SEQ ID NOs “should be given patentable weight” (*id.* at 11-12).

Again, these arguments do not “state with particularity the points believed to have been misapprehended or overlooked by the Board,” as required by 37 C.F.R. § 41.52. These arguments were specifically addressed in the initial decision in Appeal 2005-2746. See the 2005-2746 Decision at 10-12 (addressing the analogy to a “wet chemistry” array), at 5-6 and 8-9 (discussing *Gulack* and *Ngai*), and at 5-10 (discussing our reasons for concluding that the SEQ ID NOs are nonfunctional descriptive matter and therefore not entitled to patentable weight).

In the Decision, we did not repeat contents of the 2005-2746 Decision but we indicated that “[w]e stand by that reasoning and see no need to expand on it” (Decision 4). Appellants chose not to address some aspects of

the 2005-2746 Decision in their Appeal Brief, and the arguments that Appellants chose not to make have been waived. New arguments are not permitted in a Request for Rehearing. *See* 37 C.F.R. § 41.52(a)(1) (“Arguments not raised in the briefs before the Board . . . are not permitted in the request for rehearing except as permitted by paragraphs (a)(2) and (a)(3)”). *See also Cooper v. Goldfarb*, 154 F.3d 1321, 1331 (Fed. Cir. 1998) (“A party cannot wait until after the Board has rendered an adverse decision and then present new arguments in a request for reconsideration.”).

Finally, Appellants argue that the recent precedential decision in *Ex parte Nehls*, 2008 WL 258370 (BPAI 2008), is distinguishable on its facts (Req. Reh’g 8). Appellants argue that the SEQ ID NOs recited in the instant claims are not simply stored for later retrieval but have a functional effect on the claimed process:

For example, if a target sequence is designated as A and a stored sequence is designated as B, comparing is completed, where A is homologous with B, identifying is then done pursuant to the claimed methods. However, where A is not homologous with B, no identifying is done, and the next comparison may take place immediately. As such, the identity of B matters, and in fact changes the efficiency of the process, even if to an infinitesimal degree, for example conducted at the speed of a computer, so that identifying is either completed or deemed inappropriate. As such, the identity of the individual stored sequences must be deemed functional descriptive matter.

(*Id.* at 8-9.)

New arguments based on recent Board or court decisions may be acceptable in a Request for Rehearing, 37 C.F.R. § 41.52(a)(2), but this argument is unpersuasive. As we understand it, Appellants’ position is that the SEQ ID NOs are functional descriptive matter because they affect the

efficiency of comparing a target sequence to the database: if the database contains, e.g., SEQ ID NO: 16207 and a target sequence matches that sequence, the comparison can stop at that point without comparing the target sequence to the remaining sequences in the database.

Appellants' argument is unpersuasive for two reasons. First, we did not rely on *Ex parte Nehls* as a basis for affirming the rejections in this appeal. Therefore, even assuming that the facts of this case can be distinguished from those of *Nehls*, that would not show any error in the reasoning underlying our affirmance in this case.

Second, the claims do not reflect Appellants' basis for asserting that the SEQ ID NOs are functional descriptive matter. Claim 58 reads as follows:

58. A method of identifying a nucleotide sequence comprising comparing a target sequence to a sequence stored in computer readable medium having recorded thereon at least 100 nucleotide sequences including sequence selected from the group consisting of SEQ ID NO: 16207 through SEQ ID NO: 27905 and complements thereof, and identifying said target sequence as being present in the computer readable medium based on said comparison, wherein said target sequence is compared to at least one sequence selected from the group consisting of SEQ ID NO: 16207 through SEQ ID NO: 27905.

The other independent claims are similar, in that none of them states that the comparison is carried out only until an exact match, or a match with a specified degree of similarity, is found, and then the comparison is terminated. Therefore, the limitations of the claims do not support Appellants' argument that the SEQ ID NOs recited in the claims are functional because they might increase the efficiency of a sequence

comparison by limiting the number of database sequences to which a target sequence must be compared.

In summary, Appellants have not shown that we misapprehended or overlooked any points in the Decision. The request for rehearing is denied.

REHEARING DENIED

ADAMS, *Administrative Patent Judge*, concurring-in-result.

I remain of the view that the evidence and reasoning on this record does not support the Examiner's rejection, for the reasons stated in my dissenting opinions. Even though I sympathize with Appellants' position on the merits, however, I agree with the majority that – as a matter of procedure – the request for rehearing must be denied.

I write separately to cut through what may become a distraction on this record. Specifically, Appellants' sequence A – sequence B example reproduced by the majority above (*supra* 3). On that point I agree with the majority that the claims before us on appeal do not require "that the comparison is carried out only until an exact match, or a match with a specified degree of similarity, is found, and then the comparison is terminated" (*supra* 4).

Nevertheless, whether the claimed method requires the process to continue after a target sequence is identified among the stored sequences or not, for the reasons provided in my dissenting opinions, I believe the issue on this record is whether a the functional relationship between a nucleic acid molecule and the substrate of an array is lost if we perform an equivalent "wet chemistry" method on a computer. On this issue I respectfully disagree with the majority's opinion.

In summary, even though I remain of the opinion that the evidence and reasoning on this record does not support the Examiner's rejection, I agree with the majority that the Request for Rehearing must be denied.

Appeal 2007-4453
Application 09/404,520

saj

GAIL WUELLNER
MONSANTO COMPANY
800 N. LINDBERGH BLVD.
MAIL ZONE E2NA
ST. LOUIS, MO 63167